COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Investigation by the Department on its Own Motion as to the Propriety of the Rates and Charges Set Forth in the Following Tariffs: M.D.T.E. Nos. 14 and 17, filed with the Department on December 11, 1998, to become effective January 10, 1999, by New England Telephone and Telegraph Company d/b/a Bell Atlantic - Massachusetts

DTE 98-57

DIRECT TESTIMONY OF STEVEN E. TURNER

ON BEHALF OF

AT&T COMMUNICATIONS OF NEW ENGLAND, INC.

AND

MEDIAONE TELECOMMUNICATIONS OF MASSACHUSETTS, INC.

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BACKGROUND AND EDUCATION

- Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- A. My name is Steven E. Turner. My business address is Kaleo Consulting, 1130 Creekwood Drive, Garland, Texas 75044.
- Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
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- A. I head my own telecommunications and financial consulting firm, Kaleo Consulting.
- Q. PLEASE DESCRIBE YOUR EDUCATION background.
- A. I hold a Bachelor of Science degree in Electrical Engineering from Auburn University in Auburn, Alabama. I also hold a Masters of Business Administration in Finance from Georgia State University in Atlanta, Georgia.
- Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.
- A. From 1986 through 1987, I was a Research Engineer for General Electric in its Advanced Technologies Department developing high-speed graphics simulators. In 1987, I joined AT&T and, during my career there, held a variety of engineering, operations, and management positions. These positions covered the switching, transport, and signaling disciplines within AT&T. From 1995 until 1997, I worked in the Local Infrastructure and Access Management organization within AT&T. In this organization, I gained familiarity with many of the regulatory issues surrounding AT&T's local market entry, including issues concerning the unbundling of incumbent local exchange company (ILEC or incumbent) networks. I was on the AT&T team that negotiated with Southwestern Bell Telephone Company ("SWBT") concerning unbundled network element definitions and methods of interconnection. During the last three years, I have negotiated and testified on issues related to unbundled network elements costs, interconnection, and collocation. Specifically, I have direct experience in the areas of transport, signaling, interconnection, and collocation. A copy of my resume is attached as Appendix SET-1.
- Q. HAVE YOU PREVIOUSLY TESTIFIED OR FILED TESTIMONY BEFORE A PUBLIC UTILITY OR PUBLIC SERVICE COMMISSION?
- A. I have testified or filed testimony before the commissions in the states of Arkansas, California, Colorado, Delaware, Hawaii, Illinois, Kansas, Michigan, Minnesota, Missouri, Nebraska, Nevada, Oklahoma, Pennsylvania, Texas, and Washington. Additionally, I have filed testimony before the Federal Communications Commission ("FCC").

PURPOSE and summary of testimony Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am testifying on behalf of AT&T Communications of New England, Inc. ("AT&T") and MediaOne Telecommunications of Massachusetts, Inc. ("MediaOne") regarding Bell Atlantic — Massachusetts' insistence in proposed tariff, D.T.E. No. 17 that geographically relevant interconnection points ("GRIPs") must be established in every rate center for which a competitive local exchange carrier ("CLEC") assigns numbers. My testimony has three parts. First, it will briefly and simply summarize three principal reasons why Bell Atlantic's GRIP proposal should be rejected: (1) the FCC prohibits the interconnection requirements inherent in Bell Atlantic's GRIP proposal; (2) the Massachusetts Department of Telecommunications and Energy ("MDTE") properly rejected Bell Atlantic's GRIP proposal in its arbitration with MediaOne; and (3) Bell Atlantic's GRIP proposal undermines the reciprocal nature of compensation by unilaterally transferring cost from Bell Atlantic to the CLEC.

Second, Bell Atlantic has set forth in the Affidavit of Ms. Sheila M. Gorman its assessment of the costs that Bell Atlantic allegedly bears because of not having the GRIP proposal implemented in Massachusetts. My testimony will demonstrate that the analysis conducted by Bell Atlantic significantly overstates the comparative costs between what would exist with and without implementation of the GRIP proposal. Moreover, I will outline how this analysis is wholly misleading in that it only presents a one-way depiction of the costs associated with reciprocal compensation in that it fails to identify those costs that CLECs bear to terminate calls to Bell Atlantic's network.

Finally, while my testimony will show that Ms. Gorman's analysis is hopelessly Page 2

flawed both conceptually and analytically, I will also illustrate for the MDTE a simple approach to accomplish what Ms. Gorman intended to demonstrate in terms of the incremental costs Bell Atlantic must bear to complete calls to CLECs through its tandem. However, I will also illustrate that these same costs impact CLECs when they complete calls to Bell Atlantic through Bell Atlantic's tandem as well.

reasons for the rejection of bell atlantic's grip proposal the fcc prohibits the interconnection requirements inherent in bell atlantic's grip proposal.

please briefly describe bell atlantic's grip proposal.

A. Bell Atlantic's GRIP proposal requires that the CLEC establish an interconnection point in each LATA in which the CLEC assigns telephone numbers, and furthermore that Bell Atlantic may require the CLEC to provide, at Bell Atlantic's sole discretion, either an interconnection point or a rating equivalent within each Bell Atlantic rate center in a LATA.

- Q. where does the fcc reject the requirement that the clec establish an interconnection point in every rate center within the lata?
- A. The clearest language in this regard can be found in paragraph 209 of the FCC's First Report and Order:

Section 251(c)(2) gives competing carriers the right to deliver traffic terminating on an incumbent LEC's network at any technically feasible point on that network, rather than obligating such carriers to transport traffic to less convenient or efficient interconnection points. Section 251(c)(2) lowers barriers to competitive entry for carriers that have not deployed ubiquitous networks by permitting them to select the points in an incumbent LEC's network at which they wish to deliver traffic.

The FCC emphasizes in this language that the CLEC is under no obligation to "transport traffic to less convenient or efficient interconnection points." It is precisely these less convenient or efficient interconnection points that Bell Atlantic is attempting to mandate through the GRIP proposal. Bell Atlantic wants to require CLECs to interconnect at every rate center in which they offer numbers. However, the FCC expressly prohibits Bell Atlantic from making such a requirement. Further, the FCC was well aware of the reason for prohibiting such a requirement – that CLEC networks would not have the ubiquitous networks that incumbent LECs have. As such, the interconnection requirements would need to be established giving the preference to the CLEC in selecting the interconnection point. It is not that Bell Atlantic has no say in establishing these interconnects with Bell Atlantic's network.

the Massachusetts Department of Telecommunications and Energy properly rejected Bell Atlantic's GRIP proposal in its arbitration with MediaOne.
q. DID BELL ATLANTIC SURFACE THE ISSUE OF INTERCONNECTION ARRANGEMENTS ALONG THE LINE OF ITS GRIP PROPOSAL WITH MEDIAONE?

- A. Yes. This specific issue was a disputed item in Media One's arbitration with Bell Atlantic.
- ${\bf q}.$ what decision did the massachusetts department of telecommunications and energy make regarding the grip proposal?
- A. The MDTE clearly rejected Bell Atlantic's GRIP proposal. Specifically, the MDTE wrote:

Regarding Bell Atlantic's request that the Department approve its proposal to require MediaOne and Greater Media to provide IPs at or near each of Bell Atlantic's tandems, neither the Act nor the FCC's rules requires MediaOne or any CLEC to interconnect at multiple points within a LATA to satisfy an incumbent's preference for geographically relevant interconnection points. See FCC Local Competition Order at $\P\P$ 198-199.

Therefore, we find that a CLEC may designate a single IP for interconnection with an incumbent even though that CLEC may be serving a large geographic area that encompasses multiple ILEC tandems and end offices. There is no requirement or even preference under federal law that a CLEC replicate or in a lesser way mirror an ILEC's network. Indeed, the Act created a preference for CLECs to design and engineer in the most efficient way possible, which Congress envisioned could be markedly different than the ILEC's networks. Id at ¶ 172.

This decision by the MDTE could not be clearer. Please note also regarding this decision that the MDTE even rejected the notion that Bell Atlantic could require CLECs to interconnect at or near each of Bell Atlantic's tandems. Yet, Bell Atlantic's current proposal is even more egregious in that it requires CLECs to interconnect within each rate center where the CLEC offers service. In short, the MDTE has properly implemented the requirements of the Act and FCC's rules in clearly rejecting Bell Atlantic's GRIP proposal.

Bell Atlantic's GRIP proposal undermines the reciprocal nature of compensation by unilaterally transferring cost from Bell Atlantic to the CLEC. q. how does bell atlantic's grip proposal undermine the reciprocal nature of compensation?

- A. If Bell Atlantic's GRIP proposal is implemented, Bell Atlantic is transferring virtually all of the transport cost to the CLECs both for originating and terminating local calls. Bell Atlantic never acknowledges as much, but when a CLEC with a switch in Boston originates a call from one of its Worcester customers that terminates to a Bell Atlantic Worcester customer, the CLEC incurs the cost of initiating the call at its Boston switch and pays Bell Atlantic for all of the transport and switching cost from the Bell Atlantic tandem in Boston out to the Bell Atlantic switch in Worcester. This is the flip side or reciprocal side to Bell Atlantic's criticism that Bell Atlantic must pay that same cost when a call originates from one of its customers in Worcester that terminates to a CLEC customer in Worcester served off of the CLEC switch in Boston. In short, when the CLEC originates the call and hands it off to Bell Atlantic, the CLEC is responsible for all of the transport and termination cost to get the call to the terminating point a Bell Atlantic customer. These costs (i.e., the costs for which the CLEC is responsible) include both its own cost of delivering the call to the Bell Atlantic IP and all of the costs within Bell Atlantic's network from the IP to the destination. The reciprocal is also true: when Bell Atlantic's customer originates a call, Bell Atlantic is responsible for the cost of delivering that call to the CLEC's switch or IP and completing the call on the CLEC's network.
- q. in what specific way does bell atlantic's grip proposal transfer all of this cost to the clec?
- A. Specifically, Bell Atlantic is trying to force the CLEC to build transport out to Bell Atlantic's rate centers. However, the nature of this transport that which is used for interconnection is that it is not charged for as part of the reciprocal compensation elements in either call direction. As such, by Bell Atlantic requiring the CLEC to build these facilities, Bell Atlantic will not have to transport the calls in either direction (originating or terminating) instead relying on the CLEC's construction and payment for these facilities unilaterally. In short, Bell Atlantic through the GRIP proposal will have transferred its side of the reciprocal cost of interconnection onto the CLECs.

reasons for the rejection of bell atlantic's cost analysis Q. please explain why this cost analysis was done by bell atlantic.

A. My understanding is that Bell Atlantic claims that the transport costs that it is trying to transfer from itself to CLECs through the GRIP proposal are "large," and that Ms. Gorman's affidavit is designed to support that contention and quantify those costs.

Q. do you agree with the analysis conducted by bell atlantic in this regard?

A. No. Even assuming that the costs that Bell Atlantic seeks to shift to its competitors should be paid for by its competitors (an assumption that is based on a fundamentally incorrect understanding of a competitive multi-carrier environment), Ms. Gorman's analysis significantly overstates those costs. However, before I begin the process of evaluating the analysis conducted by Bell Atlantic, I must point out that Bell Atlantic has revised the exhibit to Ms. Gorman's affidavit as part of its response to information request number ATT 7-6. Whether this revision is appropriate procedurally at this late date, I cannot say. However, I can say that with this revision Bell Atlantic introduced an additional error to its analysis. My testimony will evaluate both Ms. Gorman's original analysis and her revised analysis, which includes not only the errors of her original analysis but an additional one as well.

There are essentially two fundamental flaws with the way in which Bell Atlantic has set up this study. First, Bell Atlantic has not identified the incremental costs associated with the transport due to the fact that there is now interconnection between carriers. This was the question raised by the testimony of AT&T witness Steve Jacobsen and was the issue that Ms. Gorman's affidavit purported to address. Instead, Bell Atlantic has improperly and incompletely assessed the overall cost of transmitting and terminating calls from its network to the CLECs' networks. The approach Bell Atlantic took to evaluate the charges in question is critically flawed. Second, the assumptions used by Bell Atlantic in developing its cost comparison are inaccurate and unsubstantiated. Moreover, these inaccurate and unsubstantiated assumptions are central to the cost differences for which Bell Atlantic is seeking redress. I will discuss each of these issues in more detail below identifying specifically how Bell Atlantic has overstated the difference. (See Exhibit SET-2 that documents a corrected version of Ms. Gorman's analysis.)

Q. how has bell atlantic overstated the cost for transport thRough how it set up the cost analysis?

A. Ms. Gorman states the following in her affidavit: "I hereby testify that I have conducted an analysis to determine whether there is a cost differential between BA-MA's termination of local calls on its network and the termination of calls to a competitive local exchange carrier ("CLEC")." Ms. Gorman did not need to do an analysis to find this out. The combination of network elements necessary to complete a call to another company's network, whether a CLEC or an independent, is by definition different from the cost to complete the call within a single company's own network. For example, many calls within Bell Atlantic's — or any other local carrier's — network complete within the same switch in which the call is originated such as when a person might call his neighbor or a business just down the street. However, when two companies are interconnecting two switches, switching the call within one switch is obviously impossible regardless of how close the end user customers are to one another. Nonetheless, Ms. Gorman's analysis made this type of irrelevant comparison anyway. Moreover, the manner in which she conducted the analysis is filled with errors.

First, Bell Atlantic assumed that 54 percent of the traffic in its own network terminates on the same switch it begins on — intra-office traffic. In my experience both in modeling local switching cost, negotiating with incumbents, and reviewing similar studies, Bell Atlantic's estimate appears unreasonably high. Generally, the current intra-office traffic percentage for incumbents is closer to the 40 percent range. If Ms. Gorman's analysis were adjusted to be more in line with current incumbent traffic characteristics, this adjustment would raise the inter-office component to 60 percent in Bell Atlantic's study.

Second, Bell Atlantic has assumed that it never requires a tandem to complete a local call. In other words, Bell Atlantic has assumed that zero percent of calls within its network are inter-office tandem routed calls. If this were actually the case, Bell Atlantic would not need any local tandems. Yet any efficient network architecture readily uses tandems. Bell Atlantic's failure to use tandems

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effectively would cause it to significantly over-engineer its transport network to account for having no tandem routing options for network call flow. Being quite certain that Bell Atlantic does in fact use local tandems, the question is what percentage to assume for the direct routed versus tandem routed portion of the interoffice calls. My experience is that the percentage of inter-office direct routed traffic should be approximately 30 percent (50 percent of the 60 percent interoffice) and the percentage of inter-office tandem routed traffic should be approximately 30 percent (50 percent of the 60 percent interoffice). More importantly, Bell Atlantic's own Marginal Cost Study VI, on which it relies for many of its assumptions in Ms. Gorman's analysis, shows that 41.62 percent of the interoffice calls pass through the tandem. Applying this tandem switching percentage to the analysis, the result would be that 25 percent of the interoffice calls are tandem routed and 35 percent of direct routed. This result is approximately what my experience has been. The bottom line is that that tandem routing ratio is not zero percent as currently assumed in Ms. Gorman's analysis. For the purposes of the restatement that I will perform on Ms. Gorman's analysis that follows, I will assume 25 percent of minutes are tandem routed, 35 percent of minutes are direct routed, and 40 percent of minutes are intra-switch.

- Q. how do these two REVISIONS affect ms. Gorman's analysis?
- A. Making these two revisions will raise Bell Atlantic's internal costs for terminating its own local calls from \$0.002432 up to \$0.003171 an increase of 30 percent. These adjustments alone reduce Ms. Gorman's estimated annual cost from \$49,717,960 to \$38,435,824.
- Q. are there any other overstatements in bell atlantic's analysis?
- A. Yes. The preceding two problems related to errors Ms. Gorman made in identifying Bell Atlantic's internal costs of originating and completing one of its own local calls. The final four errors relate to Ms. Gorman's identification of the costs of originating calls to CLECs for the CLECs to terminate. First, Ms. Gorman has mistakenly differentiated between intra-office and inter-office direct trunk calls that are passed to the CLEC. Specifically, as discussed earlier, Bell Atlantic can have calls that are completed within a single switch (i.e. intra-switch); however, all calls that are interconnected between Bell Atlantic and the CLEC are inter-switch. Ms. Gorman has indicated that the presence of a collocation arrangement causes the call to be "intra-switch." This is mistaken.

Nonetheless, what it appears Ms. Gorman is trying to indicate in her analysis is that there is a difference from Bell Atlantic's standpoint in the facility or transport cost it must bear between whether the CLEC interconnects using collocation or a meet-point arrangement. In principle, she is correct in this distinction. However, in practice, she performs this analysis incorrectly in that she overstates the mileage in both the collocated and meet-point arrangements and improperly includes Fiber Termination Unit Cost in the collocation interconnection arrangement.

- ${\tt Q.}$ does ms. gorman's inclusion of transport cost for the facility between bell atlantic's switch and the clec's switch comport with normal interconnection or reciprocal compensation costs?
- A. No. Regardless of how the interconnection facility is provided between the two parties, this facility is not paid for on a per minute basis. This can best be seen from Bell Atlantic's own affidavit filed by Mr. Michael J. Anglin. Mr. Anglin illustrates in two diagrams attached to his affidavit the direct trunked and tandem trunked interconnection arrangements, respectively. Mr. Anglin does not make any distinction from a rate element perspective (see the rate summaries immediately following the diagrams) between whether the interconnection is accomplished through a collocation or a meet-point arrangement. The diagram simply states that this is the "facility of carrier choice" and shows no cost for it in his analysis. Mr. Anglin's analysis is for the cost that Bell Atlantic incurs for terminating traffic originated by a CLEC. However, his analysis works properly in the other direction as well: when Bell Atlantic originates calls and delivers them to the CLEC for

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termination. Specifically, the transport is the facility of the carrier's choice - Bell Atlantic in this case - and no cost is borne for this facility by the CLEC.

- Q. is there any reason then for ms. gorman to properly include any transport cost?
- A. Possibly. Ms. Gorman appears to be trying to ascertain how much more it allegedly costs for Bell Atlantic to transmit a call to a CLEC beyond what it would cost for Bell Atlantic to transmit a call to itself. In this regard, when Bell Atlantic provides the facility from its central office to the CLEC's central office, Bell Atlantic could approximate this cost on a per minute basis using an approach similar to Ms. Gorman's approach. As explained above, however, she hasn't done this correctly because her analysis overstates the mileage in both the collocated and meet-point arrangements and improperly includes Fiber Termination Unit Cost in the collocation interconnection arrangement.
- Q. if ms. gorman had done her analysis correctly, would it nonethless be misleading to the mdte?
- A. Yes. Ms. Gorman's analysis portrays the increase in cost that Bell Atlantic must bear for this transport cost, but fails to acknowledge that the CLEC must incur precisely this same cost for calls being transmitted to Bell Atlantic. Moreover, in cases where the interconnection is occurring through the collocation arrangement, the CLEC is actually bearing the transport cost in both directions. In short, Ms. Gorman's analysis can be used as a poorly conceived proxy for the cost differential Bell Atlantic incurs when it transmits a call to a CLEC versus when it transmits a call to itself. However, for the reasons discussed elsewhere in my testimony, this comparison does not have any meaning or significance in a multi-carrier competitive environment, since it is true for all carriers. Therefore, the analysis does nothing to support BA's GRIP proposal. (Despite the irrelevance of her analysis, I will nevertheless show below, that Ms. Gorman's analysis ultimately concludes with showing that it actually costs Bell Atlantic less to transmit the call to the CLEC once the problems with her analysis are corrected. Further, her representation that Bell Atlantic must bear these costs is inconsistent with the diagrams and analysis discussed above provided by Mr. Anglin.)
- Q. What are the other three problems you referenced earlier in this portion of ms. gorman's analysis?
- A. Second, Ms. Gorman's analysis must be corrected for the incorrect mileage assumptions. Ms. Gorman's updated analysis in response to AT&T's information request number ATT 7-6 only makes this problem worse. Specifically, Ms. Gorman increases the mileage for the direct trunked arrangement from 58 miles to 82 miles. For the tandem trunked arrangement, Ms. Gorman increases the mileage from 48 miles to 67 miles. She allegedly increases these mileages to use "circuit" miles instead of "airline miles." In any regard, she has missed the point of what this mileage represents.
- Q. what do these mileages actually represent?
- A. Ms. Gorman would have the MDTE believe that on average Bell Atlantic must provide 82 miles of facilities between its end office and the CLEC's switch when the call is direct trunked. Ms. Gorman would also have the MDTE believe that on average Bell Atlantic must provide 67 miles of facilities between its tandem and the CLEC's switch. I emphasize "on average" because the manner in which Ms. Gorman should have done this mileage calculation should have taken into account the number of minutes that pass over each length of interconnection facility between itself and CLECs. For instance, in downtown Boston, where the vast majority of traffic interconnection takes place, the mileages for the interconnection facilities will be much shorter. As such, these short mileages should be heavily weighted with the traffic flow in minutes to determine the weighted average mileage between Bell Atlantic's switch and the CLEC's switch.
- Q. did you attempt to learn how ms. gorman actually developed these mileages?

- A. Yes. AT&T information request number ATT 7-2 goes directly to this question. Bell Atlantic provides with this response the method it uses to determine these average mileages.
- Q. was this analysis weighted with minutes as you described above?
- A. No. Bell Atlantic weighted this analysis with the number of trunks going across the circuit mileage. This is incredibly misleading. For example, interconnection between AYERMAPLDSO (Ayer, MA, population 6,900) and BSTNMALB1MD (Boston, MA) is weighted as 7,918 "Total Mileage" and equals the trunk quantity (24) multiplied by the circuit mileage (329.92 miles). Twenty-four trunks is the minimum trunk capacity that would be installed by a CLEC. There may be virtually no traffic over these trunks. Contrast this with the interconnection between BSTNMABEDS9 (Boston, MA) and BSTNMACOGMD (Boston, Ma) that is weighted as 8,540 "Total Mileage." This is almost the same weighting as between Ayer and Boston. Yet, the Boston-to-Boston interconnection is for 384 trunks over 22.24 miles. These 384 trunks will have considerably more traffic on them per trunk than the 24 trunks that go between Ayer and Boston. As such, the weighting per trunk should be much greater on a per minute basis, but Bell Atlantic has not done the analysis this way.
- Q. are there any other problems with the total mileage calculation bell atlantic did?
- A. Yes. If you look on a map between Ayer and Boston, for instance, you will find that the linear distance is approximately 30 miles. By car, this distance may be 35 miles. However, you would have to drive from Boston to Pittsfield and back (and then some) to get to the 329.92 miles that Bell Atlantic has included between Ayer and Boston. I have a considerable amount of experience with transport cost studies and I know that circuits do not travel in straight lines. However, many of the circuit distances Bell Atlantic is accounting for in this analysis appear extremely overstated. Just for example, Bell Atlantic shows the circuit distance from Gloucester to Boston as being 320.04 miles or Groton to Boston as being 308.87 miles. However, my favorite example may be the distance from Ayer to Quincy. To get from Ayer to Quincy, one most go through Boston (in a straight line). Remember that the distance from Ayer to Boston was 329.92 miles; however, the distance from Ayer to Quincy is only 232.29. This mileage is still outrageous. But, there is no way for these mileages to be reliable when the circuit distance from Ayer to Quincy, which would likely pass through offices in Boston, would be almost 100 miles shorter than the circuit distance from Ayer to Boston. In short, Bell Atlantic's interconnection mileage study cannot be relied upon because it was not weighted properly (with interconnection minutes) and unreliably accounts for interconnection mileages.
- Q. given these problems, what mileage would you recommend?
- A. After spending considerable time studying the interconnection facilities Ms. Gorman provided in response to AT&T information request number ATT 7-2, a more reasonable mileage would be 35 miles. This is still considerably longer than the 6.33 miles used in Ms. Gorman's assessment of the distance between various Bell Atlantic central offices.
- Q. how did you develop this mileage?
- A. Effectively, I removed those cross sections that had less than 100 trunks. These would be the cross section where the relationship between trunks and minutes will not be as accurate as for the larger cross sections. Second, I estimated the airline or straight-line mileage between the two locations. Third, I applied an airline to circuit mile factor of 1.7 based on my experience in engineering transport networks. This factor converts the straight-line mileage to the circuit mileage Bell Atlantic's rates require they be applied to. Because Bell Atlantic did not provide its data electronically, I could not in the time permitted analyze every cross section. However, I selected a large group to determine the average of 35 miles.
- Q. did you use the same approach with the tandem mileage?

- A. No. In reviewing the tandem cross sections, these offices were significantly closer together, notwithstanding Bell Atlantic's erroneous mileages to the contrary. For instance, Bell Atlantic shows a cross section between SPFDMAW001T and SPFDMAW01KD as being 8.6 miles apart. However, normally if the first eight characters of the office code are the same, the last three characters only denote different locations within the office. Nonetheless, Bell Atlantic included 8.6 miles of transport within the same office. Another example is in Worcester. Bell Atlantic shows there to be 60 miles between two offices in this same city (WRCSMACE03T and WRCSMA02EMD). This quantity of mileage would be difficult to account for in this size town. There are numerous other examples like these that I could provide. However, I decided to account for the mileage between the CLEC offices and Bell Atlantic's tandems as being the same mileage 6.33 miles that Bell Atlantic assumes between its end offices and its tandems. Bell Atlantic has not provided sufficient information to make any other assumption.
- Q. could you describe another of the problems with ms. gorman's analysis you mentioned earlier?
- A. Yes. Third, for both the direct trunked interconnection arrangement using collocation and the direct trunked interconnection arrangement using a meet-point arrangement, Ms. Gorman has included fiber termination measured unit costs. This is incorrect. In the case where the CLEC is collocated, the CLEC will pass a DS1 from its collocation arrangement over to Bell Atlantic to establish the interconnection trunks. There would be no fiber involved at all. As such, there would be no usage charges for the fiber termination components in this instance.
- Q. could you describe the final problem with ms. gorman's analysis?
- A. Fourth, Bell Atlantic has assumed that interconnection with the tandem will never be accomplished via collocation. In reality, the same options that exist for interconnecting with Bell Atlantic's end offices are available for interconnecting with Bell Atlantic's tandems. Therefore, in my restatement of Ms. Gorman's analysis, I assume that the CLECs will interconnect with Bell Atlantic's tandems using collocation as well as meet-point arrangements in a 50:50 ratio.
- Q. how do these four errors affect ms. Gorman's analysis?
- A. Correcting for these four errors lowers Bell Atlantic's internal costs for transmitting local calls to CLECs from \$0.005687 down to \$0.003052 a decrease of 46 percent. Correcting these four errors in addition to the ones identified above now shows that Bell Atlantic goes from paying \$49,717,960 to terminate calls to CLEC networks to saving \$1,809,448. In short, a proper analysis of the costs within Bell Atlantic's network shows that it costs less to terminate a call to another network than it does to terminate a call to its own network, given how Ms. Gorman set up the analysis. (Again, see Exhibit SET-2 for a comprehensive restatement of Ms. Gorman's analysis.)

simple approach to evaluating bell atlantic's additional cost Q. how can it be that ms. Gorman's analysis, if using proper assumptions, would show that bell atlantic saves money terminating calls to clecs?

A. There are two important issues to remember with how Ms. Gorman set up her analysis. First, she only accounted for costs within Bell Atlantic's network. She did not include paying for the costs of reciprocal compensation. If she had used the proper input assumptions as I have indicated above and then included compensation, the analysis would have shown that Bell Atlantic does pay a little more when a CLEC terminates a Bell Atlantic originated call compared to when Bell Atlantic completes its own customer's call. However, please keep in mind that when a CLEC originates a call on its network, it costs considerably more for the CLEC to terminate this call to Bell Atlantic compared to what it would cost the CLEC to terminate the call within its own network. Second, if you think fundamentally about how Ms. Gorman set up her analysis, the inappropriateness of her comparison becomes obvious.

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Specifically, she calculated the cost of Bell Atlantic originating and terminating a call within its own network and compared this to the cost of Bell Atlantic only originating the call. Logically, there is no way, given that switching is the largest component of the cost structure, for Ms. Gorman to eliminate half the work from within Bell Atlantic's network and not have less cost. In short, the analysis conducted by Bell Atlantic in this regard does absolutely nothing to demonstrate that it is somehow short-changed by not having the GRIP proposal implemented.

- Q. Is there a simple approach that shows the net Effect of how much bell atlantic is paying to transport calls to the clecs?
- A. Yes. The simplest approach is to simply include the terminating compensation that Bell Atlantic would pay in the analysis. This would give the total cost Bell Atlantic pays both internally and externally to transmit calls originated by its customer and completed to a CLEC customer. This could then be compared to what Bell Atlantic expended for the same type of calls, when it alone was the carrier in a monopoly world.
- Q. what does this analysis show?
- A. Adding the terminating compensation that Bell Atlantic would pay based on the rates included in Ms. Gorman's analysis shows that Bell Atlantic's cost per minute increases to \$0.004066. This results in a gap per local minute originating with Bell Atlantic and terminating to a CLEC of \$0.000896. The total dollar gap based on the minutes produced by Bell Atlantic would be \$13,682,106.55. (See Exhibit SET-3 that documents a restatement of Ms. Gorman's analysis, but also includes the effects of compensation.)
- Q. does the analysis above account for bell atlantic not paying terminating compensation on isp traffic?
- A. No. This adjustment should be accounted for in that Bell Atlantic does not pay to complete ISP calls to the CLECs' networks. Based on information Bell Atlantic provided in response to Department of Telecommunications and Energy requests in Set No. 4, Bell Atlantic only paid compensation on approximately 5 billion of the 16 billion minutes it originated to CLECs in 1999. Removing the end-office switching component of terminating compensation from the \$13.7 million quantity above for the ISP minutes reduces the gap to \$425,345.00.
- Q. should bell atlantic be compensated for this gap?
- A. No. A similar analysis could be done for CLEC originated calls terminating to Bell Atlantic that would show that the CLECs also pay considerably more per minute of use to terminate calls to Bell Atlantic than within their own networks. In short, this is simply a function of a multi-carrier environment based on competition rather than a single carrier environment based on regulation. Call flows naturally change in a competitive environment with multiple carriers requiring interconnection. And interconnection adds costs compared to handling all of the calls within your own network. This is true not only for Bell Atlantic; it is true for all carriers. Bell Atlantic should have no special right to recover these costs from other carriers when the other carriers do not recover their increased costs from Bell Atlantic. Moreover, there is nothing within the FCC rules or the Telecom Act that permit Bell Atlantic to recover this cost other than from their own retail customers. (Bell Atlantic's competitors will, of course, have to recover the increased cost of interconnection from their own customers in their own retail rates.)

summary

- Q. please summarize your testimony.
- A. My testimony has briefly and simply documented three reasons why Bell Atlantic's GRIP proposal should be rejected: (1) the FCC prohibits the interconnection requirements inherent in Bell Atlantic's GRIP proposal; (2) the MDTE properly rejected Bell Atlantic's GRIP proposal in its arbitration with MediaOne; and (3)

Bell Atlantic's GRIP proposal undermines the reciprocal nature of compensation by unilaterally transferring cost from Bell Atlantic to the CLEC.

Finally, my testimony has demonstrated that the analysis conducted by Bell Atlantic significantly overstates the comparative costs between what would exist with and without implementation of the GRIP proposal. Nonetheless, as I have indicated these additional costs (albeit, very small (\$425,345)) are simply part of operating in a competitive environment and thus they are costs that Bell Atlantic should not be able to unilaterally transfer to the CLECs.

In short, the MDTE should reject the GRIP proposal for Tariff No. 17 and instead confirm the ruling that it made regarding interconnection arrangements as found in the MediaOne arbitration order.

does this conclude your testimony? A. Yes.